

# Payroll People Piecing Perplexing Puzzles



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Mathematics

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The Weitz Company

## Part I: General Overview of Business

- The Weitz Company started in Fort Des Moines, IA in 1855
- The Weitz Company is a construction company

## Part II: Job Specifics

- Huge data base of employee payroll working on construction projects
- Employee need is calculated using production estimates

## Part III: Introduce the Problem

- You will be creating your own construction company
- Decide on a project and estimate production
- Compare actual production to estimated production
- Make adjustments

## Part IV: Background

- Student needs to know the following concepts:
  1. Quadratic Regression
  2. Residuals
  3. Residual Plots

## Part V: Business Solution

- The business fine tunes estimates in the future based on residual plots of past results

## Part VI: Student Solutions

- Overestimating production
- Underestimating production